

ABSTRACT PAPER

5 The present invention is characterized by a hybrid car  
comprising a motor generator mechanically connected with  
the crank shaft of an internal combustion engine for  
driving a car wherein the internal combustion engine is  
started by electric power supplied by a battery and power  
is generated by rotation from the internal combustion  
engine to charge the battery, an inverter for controlling  
10 the drive and power generation of the motor generator, and  
a control circuit for controlling the inverter, this hybrid  
car further characterized in that the motor generator is  
driven by battery power to start the internal combustion  
engine, and after the internal combustion engine has  
15 started, the battery is charged by the generator mode  
operation of the motor generator using the power of the  
internal combustion engine, wherein a step-down chopper  
circuit is provided between the battery and the inverter,  
and step-down control is provided to ensure that the power  
20 generation voltage will reach the level of the battery  
charging voltage through the step-down chopper circuit.